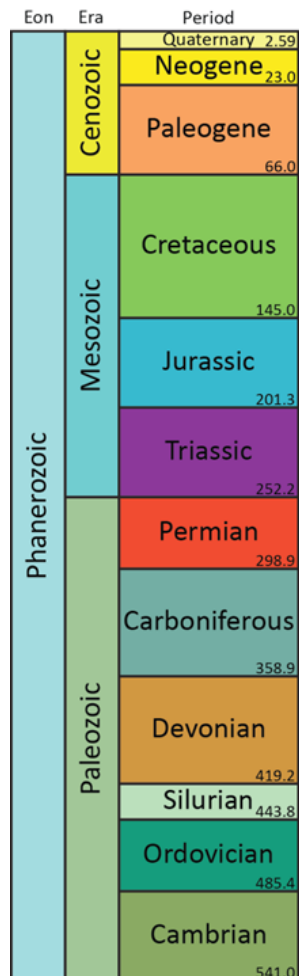


Conodonts: Microfossils of Distinction

Conodonts are extinct eel-like animals whose mineralized microscopic skeletal structures can be recovered from Indiana’s marine sedimentary rocks. First described in 1856, these mysterious remains have fascinated geologists for decades. Originally considered the teeth and jaws of an unknown group of Paleozoic fish, paleobiologists now assert that conodonts were small, laterally compressed animals. Conodonts thrived in oceans worldwide from the Cambrian through Triassic Period, approximately 530–240 million years ago.

The conodont animal was a soft-bodied organism with mineralized feeding structures located in its head. These structures, called elements, functioned as teeth and occurred in a wide variety of sizes and shapes. Conodont elements are considered microfossils because of their minute size; most are between 200 microns and 5 millimeters in length.

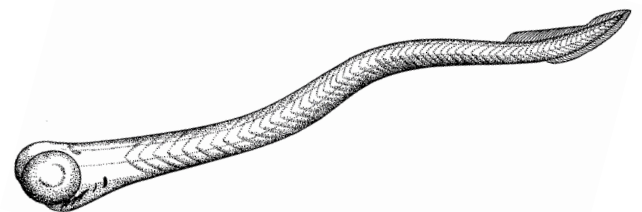
As conodont animals evolved through time, their elements changed shape. Because these changes were so distinctive, they make excellent index fossils, meaning they are useful for correlating the strata in which they are found. The Indiana Geological and Water Survey has a long history of stratigraphic research incorporating conodonts that began in the 1960s and continues today.



conodonts range from the late Cambrian to the Early Triassic



This blade-like conodont element is a microfossil, measuring less than 1 millimeter in length.



Reconstruction of a conodont animal